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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,617	12/05/2001	John Michael Beswick	111370	8073

7590 03/25/2005

Oliff & Berridge
PO Box 19928
Alexandria, VA 22320

EXAMINER

KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,617

Applicant(s)

BESWICK ET AL

Examiner

Scott Kastler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/5/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claim Language

The term "PM M62 type steel" as employed in the instant claims is clearly and specifically defined in the specification as originally filed (page 2 lines 18-25) as a steel comprising:

1.25-1.35 wt% C, 0.15-0.4 wt% Si, 0.15-0.4 wt% Mn, 3.50-4.25 wt% Cr, 10.00-11.00 wt% Mo, 1.80-2.20 wt% V, 5.75-6.75 wt% W, the balance Fe and impurities.

This term has therefore been interpreted to mean a steel meeting the above compositional requirements.

Specification

The disclosure is objected to because of the following informalities: The specification is informal in its arrangement, and it is suggested that the specification be amended to more closely conform with the suggested U.S. format shown below:

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables

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having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the instant disclosure in view of either of Japanese'602 or Japanese'743.

The admitted prior art of the instant disclosure, at page 1 for example, teaches that "toroidal type" IVTs (infinite variable transmissions) including power rollers and disks were known in the

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art at the time the invention was made, and that improved fatigue life and resistance to wear are desirable in these components, thereby showing all aspects of the above claims except the specifically recited material composition of the claimed power rollers and disks. Each of Japanese'602 and Japanese'743 teach improved steel compositions for use in the powder metallurgical formation of bearing and roller components, including disks and rollers, intended for high pressure and wear conditions which fall within the instantly recited composition ranges (see example A on Table 1 of Japanese'602 and example A on Table 1 of Japanese'743 for example). Because the steel compositions of each of Japanese'602 and Japanese'743 are specifically designed for the types of components taught by the admitted prior art of the instant disclosure to desire the properties imparted by these compositions, motivation to employ the steel compositions, formed by powder metallurgy processes, to form the power rollers and disks of the toroidal IVT of the admitted prior art of the instant disclosure, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Claims 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the instant disclosure in view of either of Japanese'602 or Japanese'743. As applied to claim 1 above, the admitted prior art of the instant disclosure in view of either of Japanese'602 or Japanese'743 show all aspects of the above claims except the use of an M62 type steel (defined at page 2 of the instant specification as stated above), although the broad range of alloys disclosed as equally useful by either of Japanese'602 or Japanese'743 encompasses M62 type steels, as instantly defined (see the English language abstracts provided by the applicant for example). It has been well settled that where, as in the instant case, the applied prior art teaches a broad composition range which encompasses an instantly claimed

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range, absent and demonstrated new or unexpected results arising therefrom, motivation to select the claimed composition range from the prior art range would have been a modification obvious to one of ordinary skill in the art at the time the invention was made. See MPEP 2144.05. In the instant case, absent any demonstrated new or unexpected results arising therefrom, motivation to select an M62 type steel from the range of steel compositions disclosed by each of Japanese'602 and Japanese'743 as equally useful for producing rollers and disks by powder metallurgy processes, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

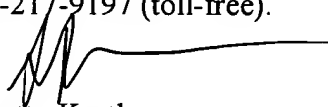
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of Yamamoto, Beswick and Beswick et al are also cited as further examples of prior art IVT components and their suggested steel compositions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler
Primary Examiner
Art Unit 1742

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